ALGEBRA II
Chapter 4 section 3
Solve $x^2 + bx + c = 0$ by Factoring
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FOCUS:
How can factoring be used to solve quadratic equations when a = 1?

VOCAB:
*Monomial:*_____

_____

*Binomial:*_____

*Trinomial:*_____

*Quadratic Equation:*_____

_____

*Root of an Equation:*_____

*Zero of a Function:*_____

WARM – UP:

Find the product.

1. $(m - 8)(m - 9)$_____
2. $(z + 6)(z - 10)$_____
3. $(y + 20)(y - 20)$_____
4. $(d + 9)^2$_____
5. $(x - 14)^2$_____
6. A car travels at an average speed of (m + 7) miles per hour for (m + 2) hours. What distance does it travel?

_____

NOTES:

Factor.

$x^2 + 14x + 48$ $x^2 + 2x - 63$ $x^2 - 3x - 18$ $x^2 - 9x - 5$

$m^2 - 121$ $r^2 + 14r + 49$ $p^2 - 24p + 144$ $x^2 - 9$

Solve the equation.

$x^2 - x - 42 = 0$ $z^2 - 3z = 54$ $u^2 = -9u$

You have a rectangular vegetable garden in your backyard that measures 15 feet by 10 feet. You want to double the area of the garden by adding the same distance x to the length and width of the garden. Find the value of x and the new dimensions of the garden.

Find the zeros of the function by rewriting the function in intercept form.

$y = x^2 + 3x - 28$ $y = x^2 - 4x + 4$

Let's see if you comprehended what we worked on in class…

Try _____ for homework